#### STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 8

# CONTRACT PROPOSAL SMALL BUSINESS ENTERPRISE

DATE AND	TIME OF BL	D OPENING:	October 10, 20	01 / A1 2:00 P.M.

**CONTRACT ID:** 11742656

WBS ELEMENT NO.: TBD (TO BE DETERMINED)

COUNTY: CHATHAM, MONTGOMERY, AND RANDOLPH

ROUTE NO.: VARIOUS

TYPE OF WORK: MAINTENANCE AND REPLACEMENT OF CABLE

GUIDERAIL AND GUARDRAIL COMPONENTS AS

**NEEDED** 

NAME OF BIDDER

ADDRESS OF BIDDER

NO BID BOND REQUIRED

#### INSTRUCTIONS TO BIDDERS

### PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement may cause the bid to be considered irregular and may be grounds for rejection of the bid.

#### **TRADITIONAL PAPER BIDS:**

- 1. Download the entire proposal from the Connect NCDOT website and return the entire proposal with your bid.
- 2. All entries on the itemized proposal sheet (bid form) shall be written in ink or typed.
- 3. The Bidder shall submit a unit price for every item on the itemized proposal sheet. The unit prices for the various contract items shall be written in figures. Unit prices shall be rounded off by the Bidder to contain no more than FOUR decimal places.
- **4.** An amount bid shall be entered on the itemized proposal sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount" column of the form.
- 5. The total amount bid shall be written in figures in the proper place on the bid form. The total amount bid shall be determined by adding the amounts bid for each item.
- 6. Changes to any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink. Do not use correction fluid, correction tape or similar product to make corrections.
- 7. The bid shall be properly executed on the included **Execution of Bid Non-collusion Affidavit, Debarment Certification and Gift Ban Certification** form. All bids shall show the following information:
  - a. Name of corporation, partnership, limited liability company, joint venture, individual or firm, submitting bid. Corporations that have a corporate seal should include it on the bid.
  - b. Name of individual or representative submitting bid and position or title held on behalf of the bidder.
  - c. Name, signature, and position or title of witness.
  - d. Completed attestation by Notary Public

#### Note: Signer, Witness and Notary Public must be different individuals.

- **8.** The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **9.** The Bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 10. THE PROPOSAL WITH THE ITEMIZED PROPOSAL SHEET ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL BE DELIVERED TO AND RECEIVED IN THE NCDOT DIVISION 8 OFFICE, LOCATED AT 902 N. SANDHILLS BLVD, BY 2:00 PM ON OCTOBER 10, 2017.
- 11. The sealed bid must display the following statement on the front of the sealed envelope:

QUOTATION FOR CONTRACT 11742656, WBS ELEMENT "TO BE DETERMINED" – MAINTENANCE AND REPLACEMENT OF CABLE GUIDERAIL AND GUARDRAIL COMPONENTS AS NEEDED IN CHATHAM, MONTGOMERY, AND RANDOLPH COUNTIES TO BE OPENED AT 2:00 P.M. ON TUESDAY, OCTOBER 10, 2017.

12. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, DIVISION 8 ATTN: JEFFREY A. STRODER, PE 902 N. SANDHILLS BLVD. ABERDEEN, NC 28315

#### AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (excluding 102-10) of the current edition of the *Standard Specifications for Roads and Structures*. The lowest responsible bidder will be notified that his/her bid has been accepted and that he/she has been awarded the contract. NCDOT reserves the right to reject any or all bids.

#### PROJECT SPECIAL PROVISIONS

#### **GENERAL**

This contract is for maintenance and replacement of cable guiderail and guardrail components as needed in Chatham, Montgomery, and Randolph Counties.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the current edition of, and attached updates to the North Carolina Department of Transportation *Standard Specifications for Roads and Structures*, the current edition of, and attached updates to the North Carolina Department of Transportation *Roadway Standards Drawings*, and the current edition of the *Manual of Uniform Traffic Control Devices* (MUTCD).

Wherever reference is given to codes, or standard specifications, or other data published by regulating agencies or accepted organizations, including but not limited to N.C. State Building Codes, Federal Specifications, ASTM Specifications, N.C. Department of Transportation 'Standard Specifications for Roads and Structures', and the like, it shall be understood that such reference is to the latest edition (including attached updates) published prior to the date of the contract documents.

The Contractor shall keep himself/herself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the *Standard Specifications*.

#### SMALL BUSINESS ENTERPRISE PROGRAM:

This is a **Small Business Enterprise Program** project, and as such, will be restricted to businesses with a gross income of not more than \$1.5 million, excluding materials during the previous calendar year. **Only contractors currently certified as a SBE contractor by the Contractual Services Unit of NCDOT and listed in the Directory of Transportation Firms at bid opening will be eligible to bid on this project.** 

Per G.S. 136-28.10, a North Carolina General Contractor's license may be waived for SBE contracts. For this project, the North Carolina General Contractor's license will be waived.

Per G.S. 136-28.10, contract payment and performance bonds may be waived. For this project, the contractor payment and performance bond will be waived.

Since general liability insurance is required, a copy of a certificate of insurance must also be submitted. Proof of small business status will be the previous year's income tax return. A copy of this return does not have to be submitted with this bid proposal, but may be requested at a later date.

Prospective bidders who qualify for the SBE program and are not currently certified should submit a completed application packet prior to bid submittal to allow time for review. The application packet and additional information on the program may be obtained online at:

https://connect.ncdot.gov/business/SmallBusiness/Pages/SBE%20Certification%20Process.aspx.

#### **CONTRACT LIMITATIONS:**

In accordance with GS 136-28.10 the total amount paid for work on this project shall not exceed five hundred thousand dollars (\$500,000.00) per year. If the cost of the amount of work successfully accomplished reaches \$500,000.00 within a one calendar year timeframe, the contract will be terminated and no additional work may be performed under the terms of this contract.

#### **CONTRACT TIME AND LIQUIDATED DAMAGES:**

The date of availability for this project is November 1, 2017. The Contractor will be notified by the Engineer of job location and scope and shall begin work on the project within 14 days after this written notification or as determined by the Engineer. Failure to begin work within 14 calendar days will result in the assessment of liquidated damages. No work will be permitted and no purchase order will be issued until all prerequisite conditions and certifications have been satisfied.

The completion date for this project is October 31, 2018. No extensions to the completion date will be authorized except as allowed by Article 108-10 of the current edition of the *Standard Specifications*.

<u>Term of the Contract</u> – The Contractor shall submit his/her bid for one year. At the option of the Department, this contract may be extended for two (2) additional periods of one (1) year each (maximum three (3) years total). No changes in the terms, conditions, etc. of this contract will be made when an extension to the contract is implemented, except that there will be a clause to allow up to a maximum 3% increase in the existing contract unit prices. The Engineer will notify the Contractor in writing by **August 1** if the contract may be extended. The Contractor must notify the Engineer in writing by **September 1** of his/her acceptance or rejection of this offer. Failure on the part of the Contractor to reply will be received as a rejection of contract extension.

The liquidated damages for this contract are Three Hundred Fifty Dollars (\$350.00) per calendar day for each calendar day when the Contractor fails to report to the project or does not complete project deadlines as required by the Engineer.

#### **BASIS OF AWARD:**

The Contractor is advised that this is an annual needs contract and that the quantities as shown on the bid form are estimates only. Actual quantities will be determined on an as needed basis. The quantities shown on the bid form will be used to establish unit prices for each line item and determination of low bid only. The Contractor shall submit a unit price for every item on the bid form. The Department reserves the right to increase or reduce quantities with no adjustment in unit prices.

<u>Unit prices should reflect actual costs; in accordance with Article 102-14, unbalanced bids</u> may be rejected.

Quotations will be evaluated based on the total bid of all items. There are no guarantees either stated or implied for the quantities as shown on the bid form. <u>Payment to the successful low bidder will be based on actual quantities of work performed and accepted at the PER UNIT PRICE for each item as quoted.</u>

The Department reserves the right to reject any or all bids.

#### PROSECUTION OF WORK:

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods of construction as may be required to complete the work described in the contract by the completion date and in accordance with Section 108 of the *Standard Specifications*.

Upon notification by the Engineer, the Contractor shall begin work within fourteen (14) calendar days. Notification shall be by phone call, email, or letter and any of these methods shall be considered sufficient. Time will start on the first day after notification of damages. The Contractor shall furnish the name of a contact person, phone number, and e-mail address if available.

The Contractor's operations are restricted to daylight hours. No work may be performed on Sundays and legal State holidays. Work shall only be performed when weather and visibility conditions allow safe operations.

#### **CONTACT PERSONS:**

The contact person for work site coordination in Chatham County will be Mr. Justin Bullock, PE, County Maintenance Engineer (919) 742-1970. Work site coordination for Montgomery County will be Mr. Matt Kitchen, PE, County Maintenance Engineer (910) 576-3667. Work site coordination for Randolph County will be Mr. Aaron Saunders, County Maintenance Engineer (336) 318-4050. The office hours for the County Maintenance offices are 7:00 AM to 3:30 PM Monday through Friday. The contact persons or their authorized representative will notify the contractor with the type work and details.

#### **SITE INVESTIGATION AND REPRESENTATION:**

(3-3-2014) 102-6 SPD 01-280

By signing the proposal documents, the Contractor acknowledges that:

- (A) He/She understands the nature of the work and general and local conditions, particularly those bearing on transportation;
- (B) He/She is familiar with the availability and cost of labor and materials;
- (C) He/She will to adhere to State regulations for safety and security of property, roads, and facilities;
- (D) He/She is able to prosecute the work in accordance with all applicable local, state and federal rules and regulations, and;
- (E) He/She has thoroughly investigated the project site(s).

Any failure on the part of the Contractor to acquaint himself/herself with all available information shall not relieve him/her from the responsibility of any aspect of the contracting process. No adjustment in contract time or contract prices will be made due to the Contractor's negligence in familiarizing himself/herself with the contract or project site(s).

#### NO MAJOR CONTRACT ITEMS:

(2-19-02) (Rev. 8-21-07) 104 SPI G31

None of the items included in this contract will be major items.

#### **NO SPECIALTY ITEMS:**

(-1-95) 108-6 SP1 G34

None of the items included in this contract will be specialty items (see Article 108-6 of the 2012 Standard Specifications).

#### LOCATING EXISTING UNDERGROUND UTILITIES:

(3-20-12) 105 SPI G115

Revise the 2012 Standard Specifications as follows:

#### Page 1-43, Article 105-8, line 28, after the first sentence, add the following:

Identify excavation locations by means of pre-marking with white paint, flags, or stakes or provide a specific written description of the location in the locate request.

#### RESOURCE CONSERVATION AND ENVIRONMENTALLY SUSTAINABLE PRACTICES:

(5-21-13) (Rev. 5-19-15) 104-13 SPI G118

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(3), and NCGS 136-28.8, it is the objective of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, to find ways to recycle and reuse materials, to consider and minimize, where economically feasible, the environmental impacts associated with agency land use and acquisition, construction, maintenance and facility management for the benefit of the Citizens of North Carolina.

To achieve the mission of reducing environmental impacts across the state, the Department is committed to supporting the efforts to initiate, develop and use products and construction

methods that incorporate the use of recycled, solid waste products and environmentally sustainable practices in accordance with Article 104-13 of the *Standard Specifications*.

Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills and any practice that minimizes the environmental impact on the project annually on the Project Construction Reuse and Recycling Reporting Form. The Project Construction Reuse and Recycling Reporting Form and a location tool for local recycling facilities are available at:

http://connect.ncdot.gov/resources/Environmental/Pages/North-Carolina-Recycling-Locations.aspx.

Submit the Project Construction Reuse and Recycling Reporting Form by August 1 annually to <u>valuemanagementunit@ncdot.gov</u>. For questions regarding the form or reporting, please contact the State Value Management Engineer at 919-707-4810.

#### **DOMESTIC STEEL:**

(4-16-13) 106 SPI G120

Revise the 2012 Standard Specifications as follows:

Page 1-49, Subarticle 106-1(B) Domestic Steel, lines 2-7, replace the first paragraph with the following:

All steel and iron products that are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel and iron products may be used provided the combined material cost of the items involved does not exceed 0.1% of the total amount bid for the entire project or \$2,500, whichever is greater. If invoices showing the cost of the material are not provided, the amount of the bid item involving the foreign material will be used for calculations. This minimal amount of foreign produced steel and iron products permitted for use is not applicable to high strength fasteners. Domestically produced high strength fasteners are required.

#### **MAINTENANCE OF PROJECT:**

The Contractor shall maintain the project from the date construction begins until project is finally accepted in accordance with Section 104-10, Maintenance of Project, Section 104-11, Final Clean Up, and Section 105-16, Failure to Maintain the Project or Perform Erosion Control Work.

#### **OUTSOURCING OUTSIDE THE USA:**

(9-21-04) (Rev. 5-16-06) SPI G150

All work on consultant contracts, services contracts, and construction contracts shall be performed in the United States of America. No work shall be outsourced outside of the United States of America.

*Outsourcing* for the purpose of this provision is defined as the practice of subcontracting labor, work, services, staffing, or personnel to entities located outside of the United States.

The North Carolina Secretary of Transportation shall approve exceptions to this provision in writing.

#### **IRAN DIVESTMENT ACT:**

(5-17-16) SP01 G151

As a result of the Iran Divestment Act of 2015 (Act), Article 6E, N.C. General Statute § 147-86.55, the State Treasurer published the Final Divestment List (List) which includes the Final Divestment List-Iran, and the Parent and Subsidiary Guidance-Iran. These lists identify companies and persons engaged in investment activities in Iran and will be updated every 180 days. The List can be found at <a href="https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Iran-Divestment-Act-Resources.aspx">https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Iran-Divestment-Act-Resources.aspx</a>

By submitting the Offer, the Contractor certifies that, as of the date of this bid, it is not on the then-current List created by the State Treasurer. The Contractor must notify the Department immediately if, at any time before the award of the contract, it is added to the List.

As an ongoing obligation, the Contractor must notify the Department immediately if, at any time during the contract term, it is added to the List. Consistent with § 147-86.59, the Contractor shall not contract with any person to perform a part of the work if, at the time the subcontract is signed, that person is on the then-current List.

During the term of the Contract, should the Department receive information that a person is in violation of the Act as stated above, the Department will offer the person an opportunity to respond and the Department will take action as appropriate and provided for by law, rule, or contract.

#### **GIFTS FROM VENDORS AND CONTRACTORS:**

(12-15-09) 107-1 SPI G152

By Executive Order 24, issued by Governor Perdue, and *N.C.G.S.*§ 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (A) Have a contract with a governmental agency; or
- (B) Have performed under such a contract within the past year; or
- (C) Anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and *N.C.G.S.* § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

#### **LIABILITY INSURANCE:**

(5-20-14) SPI GI60

Revise the 2012 Standard Specifications as follows:

Page 1-60, Article 107-15 LIABILITY INSURANCE, line 16, add the following as the second sentence of the third paragraph:

Prior to beginning services, all contractors shall provide proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured subcontractors, irrespective of whether having regularly in service fewer than three employees.

#### **EMPLOYMENT:**

(11-15-11) (Rev. 1-17-12) 108, 102 SPI G184

Revise the 2012 Standard Specifications as follows:

Page 1-20, Subarticle 102-15(O), delete and replace with the following:

(O) Failure to restrict a former Department employee as prohibited by Article 108-5.

Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

#### **STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:**

(9-18-12) SPI G185

Revise the 2012 Standard Specifications as follows:

Replace all references to "State Highway Administrator" with "Chief Engineer".

#### **SUBLETTING OF CONTRACT:**

(11-18-2014) 108-6 SPI G186

Revise the 2012 Standard Specifications as follows:

Page 1-66, Article 108-6 Subletting of Contract, line 37, add the following as the second sentence of the first paragraph:

All requests to sublet work shall be submitted within 30 days of the date of availability or prior to expiration of 20% of the contract time, whichever date is later, unless otherwise approved by the Engineer.

Page 1-67, Article 108-6 Subletting of Contract, line 7, add the following as the second sentence of the fourth paragraph:

Purchasing materials for subcontractors is not included in the percentage of work required to be performed by the Contractor. If the Contractor sublets items of work but elects to purchase material for the subcontractor, the value of the material purchased will be included in the total dollar amount considered to have been sublet.

#### **DRIVEWAYS AND PRIVATE PROPERTY:**

The Contractor shall maintain access to driveways for all residents and property owners throughout the life of the project.

The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract.

#### **CONTRACTOR CLAIM SUBMITTAL FORM:**

(2-12-14) 104-3 SPD 01-440

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the *Contractor Claim Submittal Form (CCSF)* available through the Construction Unit or at <a href="https://connect.ncdot.gov/projects/construction/Pages/Construction-Resources.aspx">https://connect.ncdot.gov/projects/construction/Pages/Construction-Resources.aspx</a> as Form CCSF under Construction Forms.

Any claims for additional compensation and/or extensions of the completion date shall be submitted to the Division Engineer in writing, with detailed justification, prior to submitting the final invoice payment. Once an invoice is received and accepted that is marked as "Final", the Contractor shall be barred from recovery.

#### **PAYMENT AND RETAINAGE:**

Payment will be made at the contract unit price. Prices and payment will be full compensation for all work covered. All work items necessary to complete the work other than listed on the "Bid Proposal Form" will be considered incidental in nature and no further compensation will be made. Any work performed in an unsatisfactory manner could be a basis for cancellation of the contract.

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the Standard Specifications. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. **There will be no retainage held on this contract**. One hundred percent (100%) payment shall be made after successful completion of the work and all quantities have been verified. The invoices will show the requisition number and purchase order number and should state "Terms Net Ten (10) Days."

#### **AUTHORITY OF THE ENGINEER:**

The Engineer for this project shall be the Division Engineer, Division 08, Division of Highways, North Carolina Department of Transportation, acting directly or through his/her duly authorized representatives.

The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders, as the Contractor fails to carry out promptly.

#### **MATERIALS AND TESTING**

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the *Standard Specifications* and the Department's "Materials and Test Manual." However the Engineer may reduce the frequency of sampling and testing where he/she deems it appropriate for the project under construction.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the *Standard Specifications for Roads and Structures*. Material which is not properly certified will not be accepted.

#### **INSPECTION**

All work shall be subject to inspection by the Engineer at any time. Routinely, the Engineer will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Engineer informed of his/her proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Engineer.

#### SUPERVISION BY CONTRACTOR:

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hours-notice. Such employee shall be fully authorized to conduct all business with the subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer.

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He/She shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his/her option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

#### **SAFETY AND ACCIDENT PROTECTION:**

In accordance with Article 107-21 of the Standard Specifications, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his/her own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

#### **UTILITY CONFLICTS:**

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his/her representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public.

#### **EXTENSION OF CONTRACT TIME:**

Failure on the part of the Contractor to furnish bonds or certifications or to satisfy preliminary requirements necessary to issue the purchase order will not constitute grounds for extension of the contract time. If the Contractor has fulfilled all preliminary requirements for the issuance of a purchase order, and the purchase order authorization is not available by the date of availability, the Contractor shall be granted an extension equal to the number of calendar days the purchase order authorization is delayed after the date of availability.

#### **EROSION CONTROL:**

The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent erosion and siltation.

### SMALL BUSINESS ENTERPRISE CONTRACT PROJECT SPECIAL PROVISIONS

#### CABLE GUIDERAIL AND GUARDRAIL

#### **GENERAL NOTES:**

Installation and repair of cable guiderail and guardrail at various locations in each county will be designated by the Engineer. The amount of cable guiderail to be placed in each county will be a minimum of 50 LF of cable guiderail and/or equivalent to other cable guiderail components and guardrail will be a minimum of 150 LF of steel beam guardrail and/or equivalent to other guardrail components before the Contractor would be notified of coming into the county unless the repair is specified as Emergency Call back. Emergency call back mobilization will only be paid at median locations of 4-lane divided facilities or at other locations deemed critical by the Engineer. Mobilization for all other locations will be considered incidental to the various items within the contract. The Contractor shall note that installation of cable guiderail and guardrail throughout the county will vary on the amount of new, existing, or damaged cable guiderail and guardrail on each route and should take this into consideration when submitting the bid.

The contractor will be notified on routine maintenance and repair by the Engineer and shall begin work on the sections of guardrail within 14 days after notification as determined by Engineer. Failure to respond within the designated time frame or as approved by the Engineer may result in cancellation of this contract.

During the maintenance and/or repair of damaged sections of cable guiderail and guardrail, the Contractor shall replace all needed components of cable guiderail and guardrail as directed by the Engineer and stabilize existing cable guiderail and/or guardrail and appurtenances at the site.

All bid items listed on the bid sheet shall include all necessary incidental hardware to complete the cable guiderail and guardrail repairs. The Contractor shall take this into consideration when submitting the bid.

The bid item for shop curve guardrail includes various radii. The Contractor shall take this into consideration when submitting the bid.

Basis of payment for this contract will be the unit or lump sum prices bid for various items accepted in place. Prices and payment will be full compensation for all work covered including, but not limited to furnishing and erecting post, offset blocks, rail, terminal sections and all other miscellaneous hardware to complete the work.

Under separate bid items, additional posts shall include offset blocks and other miscellaneous hardware to complete the work. The Contractor shall consider this when submitting a bid.

Units on the bid proposal form are for bid evaluation only and do not reflect purchase order limits. Purchase order quantities will be based on actual need. Section 104-5 of the 2012 Standard Specifications will not be acceptable. The Engineer reserves the right to make, at any time during the work, such changes in quantities as necessary to satisfactorily complete the project.

Any damage to adjacent shoulders, medians, paved areas, or other facilities shall be repaired or replaced by the Contractor to the satisfaction of the Engineer at no cost to the Department.

All work performed by the Contractor shall be in compliance with the 2012 Standard Specifications, any included addenda, and workmanship appearance done to the satisfaction of the Engineer.

#### **CABLE GUIDERAIL & GUARDRAIL REMOVAL:**

The removal of existing and/or damaged cable guiderail and guardrail established by the Engineer shall be completed in accordance with Section 863. The Contractor shall exercise care not to damage adjoining structures or other appurtenances. Any damage caused by the Contractor shall be repaired at no cost to the Department. **All damaged Guardrail and components shall become the property of the Contractor**. The cost of removal and disposal of the existing section or damaged sections of guardrail and components will be paid at the unit price for "Guardrail Removal". "Guardrail Removal" will only be applicable when removal includes rail, posts, and blocks.

#### **CABLE GUIDERAIL REPAIR:**

Repair of cable guiderail will be in locations as directed by the Engineer. The repair of damaged guiderail will be defined as the section where parts have been disturbed and will be measured from center to center of undisturbed posts (exclusive of any length which is within pay limits of guardrail anchor). No separate payment will be made for splicing, posts, tensioning, delineators, hardware or any other components as all such items will be inclusive and paid for under the pay item *Double Faced Cable Guiderail Repair*.

The quantity of Double Faced Anchor Units to be paid for will be the actual number of units which have been repaired and accepted. No separate measurement will be made of any rail, terminal sections, posts, offset blocks, concrete, hardware, or any other components of the unit which are within the pay limits as all such components will be considered to be part of the unit and paid for as *Cable Guiderail Anchor Unit Repair*.

The tension in the system must be checked and recorded in accordance with the manufacturer's recommendations and as directed by the Engineer. Tension testing is to be considered incidental to the repair.

#### **EMERGENCY CALL BACK:**

A separate bid item will be used for emergency call back mobilization for damaged cable guiderail and guardrail and appurtenances located within the median of four lane divided facilities and at other locations deemed critical by the Engineer and shall include a cost for mobilizing into the county on an emergency basis.

Under this item the Contractor must respond to and make repairs to the damaged section and/or sections designated by the Engineer within 7 calendar days of notification to perform emergency repairs. Liquidated damages for this contract are Three Hundred and Fifty Dollars (\$350.00) per day for each occurrence when the Contractor fails to respond and complete work within the 7 day time period. The price for **Emergency Call Back Mobilization** for damaged cable

guiderail/guardrail and appurtenances shall include the cost of mobilizing into Randolph, Chatham and Montgomery Counties on an emergency basis.

In order to qualify for the item **Emergency Call Back Mobilization** the following conditions must be met:

- a. The Engineer gives notice to the Contractor authorizing the move in.
- b. The Contractor is not already in Randolph, Chatham or Montgomery County making repairs; therefore, the contractor will not be eligible for Emergency Call Back Mobilization if already in Randolph, Chatham or Montgomery County making repairs. (Note that the Contractor may be notified of several emergency repairs under one Emergency Call Back Mobilization).
- c. The last time the Contractor was in Randolph, Chatham or Montgomery County making repairs all available work was completed and was released by the Engineer.
- d. The Contractor responded with adequate personnel, equipment and materials to complete the work within 7 calendar days.

Emergency repairs for damaged cable guiderail and guardrail will have no minimum limits and the Contractor shall be paid per each for **Emergency Call Back Mobilization** for each mobilization meeting the conditions above. Payment for **Emergency Call Back Mobilization** will be considered full payment for all labor, equipment, materials, and incidentals necessary to make the repairs.

#### **EXTRA LENGTH GUARDRAIL POSTS:**

The Contractor shall utilize extra length guardrail posts at the locations indicated in the plans and as directed by the Engineer.

Extra length guardrail posts shall be in accordance with Section 862 of the latest *Standard Specifications* and the attached updated *Roadway Standard Drawings* except the posts shall be 8 feet in length.

Extra Length Guardrail Posts shall be measured and paid for in units of each that have been installed and accepted.

Pay ItemPay UnitExtra Length Guardrail Posts (8' Steel)Each

#### **GUARDRAIL ANCHOR UNITS, TYPE M-350:**

(4-20-04) (Rev. 7-21-15) 862 SP08 R060

#### **Description**

Furnish and install guardrail anchor units in accordance with the details in the plans, the applicable requirements of Section 862 of the 2012 Standard Specifications, attached Special Provisions and addenda and at locations shown in the plans.

#### **Materials**

Furnish guardrail anchor units listed on the NCDOT <u>Approved Products List</u> at <a href="https://apps.dot.state.nc.us/vendor/approvedproducts/">https://apps.dot.state.nc.us/vendor/approvedproducts/</a> or approved equal.

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each guardrail anchor unit certifying it meets the requirements of NCHRP Report 350, Test Level 3, in accordance with Article 106-2 of the 2012 Standard Specifications.
- (B) Certified working drawings and assembling instructions from the manufacturer for each guardrail anchor unit in accordance with Article 105-2 of the 2012 Standard Specifications.

No modifications shall be made to the guardrail anchor unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

#### **Construction Methods**

Guardrail end delineation shall be required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Article 1088-3 of the 2012 Standard Specifications and is incidental to the cost of the guardrail anchor unit.

#### **Measurement and Payment**

Measurement and payment will be made in accordance with Article 862-6 of the 2012 Standard Specifications.

Payment will be made under:

Pay ItemPay UnitGuardrail Anchor Units, Type M-350Each

#### **GUARDRAIL END UNITS, TYPE - TL-3:**

(4-20-04) (Rev. 9-19-17) 862 SP8 R65

#### **Description**

Furnish and install guardrail end units in accordance with the details in the plans, the applicable requirements of Section 862 of the 2012 Standard Specifications, and at locations shown in the plans.

#### **Materials**

Furnish guardrail end units listed on the NCDOT <u>Approved Products List</u> at <a href="https://apps.dot.state.nc.us/vendor/approvedproducts/">https://apps.dot.state.nc.us/vendor/approvedproducts/</a> or approved equal.

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each guardrail end unit certifying it meets the requirements of the AASHTO Manual for Assessing Safety Hardware, Test Level 3, in accordance with Article 106-2 of the 2012 Standard Specifications.
- (B) Certified working drawings and assembling instructions from the manufacturer for each guardrail end unit in accordance with Article 105-2 of the 2012 Standard Specifications.

No modifications shall be made to the guardrail end unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

#### **Construction Methods**

Guardrail end delineation is required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Article 1088-3 of the 2012 Standard Specifications and is incidental to the cost of the guardrail end unit.

#### **Measurement and Payment**

Measurement and payment will be made in accordance with Article 862-6 of the 2012 Standard Specifications.

Payment will be made under:

Pay ItemPay UnitGuardrail End Units, Type TL-3Each

#### **IMPACT ATTENUATOR UNITS, TYPE- TL-3:**

(4-20-04) (Rev. 9-19-17) SP8 R75

#### **Description**

Furnish and install impact attenuator units and any components necessary to connect the impact attenuator units in accordance with the manufacturer's requirement, the details in the plans and at locations shown in the plans.

#### **Materials**

Furnish impact attenuator units listed on the <u>Approved Products List</u> at <a href="https://apps.dot.state.nc.us/vendor/approvedproducts/">https://apps.dot.state.nc.us/vendor/approvedproducts/</a> or approved equal. Prior to installation the Contractor shall submit to the Engineer:

(A) FHWA acceptance letter for each impact attenuator unit certifying it meets the requirements of Manual for Assessing Safety Hardware, Test Level 3, in accordance with Article 106-2 of the 2012 Standard Specifications.

(B) Certified working drawings and assembling instructions from the manufacturer for each impact attenuator unit in accordance with Article 105-2 of the 2012 Standard Specifications.

No modifications shall be made to the impact attenuator unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans and details and assembling instructions furnished by the manufacturer.

#### **Construction Methods**

If the median width is 40 feet or less, the Contractor shall supply NON-GATING Impact Attenuator Units.

If the median width is greater than 40 feet, the Contractor may use GATING or NON-GATING Impact Attenuator Units.

#### **Measurement and Payment**

Impact Attenuator Unit, Type - TL-3 will be measured and paid at the contract unit price per each. Such prices and payment will be full compensation for all work covered by this provision including, but not limited to, furnishing, installing and all incidentals necessary to complete the work.

Payment will be made under:

Pay ItemPay UnitImpact Attenuator Units, Type – TL-3Each

#### STRUCTURE ANCHOR UNIT, ANCHORAGE ON BOX CULVERT:

The Contractor shall furnish and install structure anchor units as necessary, or as directed by the Engineer, and in accordance with the attached Standard Drawing 862D03 (Sheet 7 of 7). The basis of payment will be per each. All items, including but not limited to base plates, support plates, steel posts, wood posts, steel tubes, welding hardware, etc. necessary to complete the work shall be included in the price.

Payment will be made under:

Pay ItemPay UnitStructure Anchor Unit, Anchorage on Box CulvertEach

#### **MATERIALS:**

(2-21-12) (Rev. 11-22-16) 1000, 1002, 1005, 1016, 1018, 1024, 1050, 1074, 1078, 1080, 1081, 1086, 1084, 1087, 1092 SP10 R01

Revise the 2012 Standard Specifications as follows:

Page 10-1, Article 1000-1, DESCRIPTION, lines 9-10, replace the last sentence of the first paragraph with the following:

Type IL, IP, IS or IT blended cement may be used instead of Portland cement.

#### Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

If any change is made to the mix design, submit a new mix design (with the exception of an approved pozzolan source change).

If any major change is made to the mix design, also submit new test results showing the mix design conforms to the criteria. Define a major change to the mix design as:

- (1) A source change in coarse aggregate, fine aggregate or cement.
- (2) A pozzolan class or type change (e.g. Class F fly ash to Class C fly ash).
- (3) A quantitative change in coarse aggregate (applies to an increase or decrease greater than 5%), fine aggregate (applies to an increase or decrease greater than 5%), water (applies to an increase only), cement (applies to a decrease only), or pozzolan (applies to an increase or decrease greater than 5%).

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-1, Article 1000-2, MATERIALS, line 16; Page 10-8, Subarticle 1000-7(A), Materials, line 8; and Page 10-18, Article 1002-2, MATERIALS, line 9, add the following to the table of item references:

ItemSectionType IL Blended Cement1024-1

Page 10-1, Subarticle 1000-3(A), Composition and Design, lines 25-27, replace the second paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced.

Page 10-2, Subarticle 1000-3(A), Composition and Design, lines 12-21, delete the third paragraph through the sixth paragraph beginning with "If any change is made to the mix design, submit..." through "...(applies to a decrease only)."

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

			REC	T/ OUIREME	ABLE 100 ENTS FOI		RETE				
of		Maximu		Cement R			ncy Max.	Cemer	ıt Conte	nt	
Class Concrete	Min. Comp. Strength at 28 days	Air-Entr		Non Entraine Concrete		ated	ated	Vibrat	ed	Non- V	ibrated
Concr	Min. Com Strength at 28 days	Rounded Aggregate	Angular Aggre- gate	Rounded Aggregate	Angular Aggre- gate	Vibrated	Non- Vibrated	Min.	Max.	Min.	Max.
Units	psi					inch	inch	lb/cy	lb/cy	lb/cy	lb/cy
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-
AA Slip Form	4,500	0.381	0.426	-	-	1.5	-	639	715	-	-
Drilled Pier	4,500	-	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800
A	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	602	-
В	2,500	0.488	0.567	0.559	0.630	1.5 machine- placed 2.5 hand- placed	4	508	-	545	-
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	-	-
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow- able	-	-	40	100
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flow- able	-	-	100	as needed
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	-	-
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	-	-

Page 10-6, Subarticle 1000-4(I), Use of Fly Ash, lines 36-2, replace the first paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced. Use Table 1000-1 to determine the maximum allowable water-cementitious material (cement + fly ash) ratio for the classes of concrete listed.

Page 10-7, Table 1000-3, MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO, delete the table.

Page 10-7, Article 1000-5, HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE, lines 30-31, delete the second sentence of the third paragraph.

Page 10-19, Article 1002-3, SHOTCRETE FOR TEMPORARY SUPPORT OF EXCAVATIONS, line 30, add the following at the end of Section 1002:

#### (H) Handling and Storing Test Panels

Notify the Area Materials Engineer when preconstruction or production test panels are made within 24 hours of shooting the panels. Field cure and protect test panels from damage in accordance with ASTM C1140 until the Department transports panels to the Materials and Tests Regional Laboratory for coring.

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

•	ABC(M)	ABC	9M	14M	78M	67	6M	57M	57	5	467M	4	Std. Size #	Percentage of Total by Weight Passing	
	1	'	'	ı	ı	'	'	'	'	'	100	100	2"	e of T	
	100	100	ı	1	1	1	1	100	100	100	95-100	90-100	1 1/2"	otal by	
	75-100	75-97	ı	1	1	100	100	95-100	95-100	90-100	ı	20-55	1"	Weight ]	
ı	ı	ı	ı	1	100	90-100	90-100	ı	1	20-55	35-70	0-15	3/4"	Passing	AGGR
100	45-79	55-80	100	100	98-100	1	20-55	25-45	25-60	0-10	ı	1	1/2"		AGGREGATE GRADATION - COARSE AGGREGATE
80-100	1	ı	98-100	98-100	75-100	20-55	0-20	ı	ı	0-5	0-30	0-5	3/8"		GRADA
5-40	20-40	35-55	85-100	35-70	20-45	0-10	0-8	0-10	0-10	ı	0-5	1	#4		TION -
0-20	1	ı	10-40	5-20	0-15	0-5	ı	0-5	0-5	ı	ı	1	#		COARS
I	0- 25	25-45	1	ı	1	1	1	1	ı	1	ı	1	#10		E AGG
0-10	ı		0-10	0-8	1		1	1	ı	ı	ı	1	#16		REGA
ı	1	14-30	1	1	1	1	1	1	1	1	ı	1	#40		TE
0-2.5	0-12 <sup>B</sup>	4-12 <sup>B</sup>	Α	>	→	Α	A	Α	A	Α	Α	Α	#200		
AST	Maintenance Stabilization	Aggregate Base Course, Aggregate Stabilization	AST	Asphalt Plant Mix, AST, Structural Concrete, Weep Hole Drains	Asphalt Plant Mix, AST, Structural Concrete, Weep Hole Drains	Asphalt Plant Mix, AST, Structural Concrete	AST	AST, Concrete Pavement	AST, Structural Concrete, Shoulder Drain Stone, Sediment Control Stone	AST, Sediment Control Stone	Asphalt Plant Mix	Asphalt Plant Mix	Remarks	-	

<sup>A. See Subarticle 1005-4(A).
B. See Subarticle 1005-4(B).
C. For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6).</sup> 

#### Page 10-39, Article 1016-3, CLASSIFICATIONS, lines 27-32, replace with the following:

Select material is clean, unweathered durable, blasted rock material obtained from an approved source. While no specific gradation is required, the below criteria will be used to evaluate the materials for visual acceptance by the Engineer:

- (A) At least 50% of the rock has a diameter of from 1.5 ft to 3 ft,
- **(B)** 30% of the rock ranges in size from 2" to 1.5 ft in diameter, and
- (C) Not more than 20% of the rock is less than 2" in diameter. No rippable rock will be permitted.

Page 10-40, Tables 1018-1 and 1018-2, PIEDMONT, WESTERN AND COASTAL AREA CRITERIA FOR ACCEPTANCE OF BORROW MATERIAL, under second column in both tables, replace second row with the following:

Acceptable, but not to be used in the top 3 ft of embankment or backfill

Page 10-46, Article 1024-1, PORTLAND CEMENT, line 33, add the following as the ninth paragraph:

Use Type IL blended cement that meets AASHTO M 240, except that the limestone content is limited to between 5 and 12% by weight and the constituents shall be interground. Class F fly ash can replace a portion of Type IL blended cement and shall be replaced as outlined in Subarticle 1000-4(I) for Portland cement. For mixes that contain cement with alkali content between 0.6% and 1.0% and for mixes that contain a reactive aggregate documented by the Department, use a pozzolan in the amount shown in Table 1024-1.

Page 10-46, Table 1024-1, POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE, replace with the following:

TABLE		1024-1
POZZOLANS FOR USE	IN PORTLAND CEMENT CONCRETE	
Pozzolan	Rate	
Class E Ely Ash	20% - 30% by weight of required cement content	
Class F Fly Ash	with 1.0 lb Class F fly ash per lb of cement replaced	
Ground Granulated Blast	35%-50% by weight of required cement content	
Furnace Slag	with 1.0 lb slag per lb of cement replaced	
Microsiliaa	4%-8% by weight of required cement content	
Microsilica	with 1.0 lb microsilica per lb of cement replaced	

Page 10-47, Subarticle 1024-3(B), Approved Sources, lines 16-18, replace the second sentence of the second paragraph with the following:

Tests shall be performed by AASHTO's designated National Transportation Product Evaluation Program (NTPEP) laboratory for concrete admixture testing.

Page 10-65, Article 1050-1, GENERAL, line 41, replace the first sentence with the following:

All fencing material and accessories shall meet Section 106.

Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11, replace the first two sentences with the following:

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and conformance to M306 loading (40,000 lb.) will be required only when noted on the design documents.

Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1078-1 REQUIREMENTS FOR CONCRETE				
Property	28 Day Design Compressive Strength 6,000 psi or less	28 Day Design Compressive Strength greater than 6,000 psi		
Maximum Water/Cementitious Material Ratio	0.45	0.40		
Maximum Slump without HRWR	3.5"	3.5"		
Maximum Slump with HRWR	8"	8"		
Air Content (upon discharge into forms)	5 + 2%	5 + 2%		

Page 10-151, Article 1080-4, INSPECTION AND SAMPLING, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-161, Subarticle 1081-1(A), Classifications, lines 29-33, delete first 3 sentences of the description for Type 2 and replace with the following:

**Type 2 -** A low-modulus, general-purpose adhesive used in epoxy mortar repairs. It may be used to patch spalled, cracked or broken concrete where vibration, shock or expansion and contraction are expected.

Page 10-162, Subarticle 1081-1(A), Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A. Lines 16-22, delete Types 6A, 6B and 6C.

Page 10-162, Subarticle 1081-1(B), Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

Page 10-163, Table 1081-1, PROPERTIES OF MIXED EPOXY RESIN SYSTEMS, replace with the following:

TABLE 1081-1 PROPERTIES OF MIXED EPOXY RESIN SYSTEMS	<b>EPOXY</b> ]	RESIN S	YSTEMS				
Property	Type 1	Type 2	Type 3	Type 3A	Type 4A	Type 4B	Type 5
Viscosity-Poises at 77°F ± 2°F	Gel	10-30	25-75	Gel	40-150	40-150	1-6
Spindle No.	ı	ω	4	1	4	4	2
Speed (RPM)	ı	20	20	l	10	10	50
Pot Life (Minutes)	20-50	30-60	20-50	5-50	40-80	40-80	20-60
Minimum Tensile Strength at 7 days (psi)	1,500	2,000	4,000	4,000	1,500	1,500	4,000
Tensile Elongation at 7 days (%)	30 min.	30 min.	2-5	2-5	5-15	5-15	2-5
Min. Compressive Strength of 2". mortar cubes at 24 hours	3,000 (Neat)	4,000-	6,000-	6,000 (Neat)	3,000	3,000	6,000
Min. Compressive Strength of 2" mortar cubes at 7 days	5,000 (Neat)	ı	ı	ı	ı	5,000	ı
Maximum Water Absorption (%)	1.5	1.0	1.0	1.5	1.0	1.0	1.0
Min. Bond Strength Slant Shear Test at 14 days (psi)	1,500	1,500	2,000	2,000	1,500	1,500	1,500

Page 10-164, Subarticle 1081-1(E), Prequalification, lines 31-33, replace the second sentence of the first paragraph with the following:

Manufacturers choosing to supply material for Department jobs must submit an application through the Value Management Unit with the following information for each type and brand name:

#### Page 10-164, Subarticle 1081-1(E)(3), line 37, replace with the following:

(3) Type of the material in accordance with Articles 1081-1 and 1081-4,

**Page 10-165, Subarticle 1081-1(E)(6), line 1,** in the first sentence of the first paragraph replace "AASHTO M 237" with "the specifications".

Page 10-165, Subarticle 1081-1(E), Prequalification, line 9-10, delete the second sentence of the last paragraph.

**Page 10-165, Subarticle 1081-1(F), Acceptance, line 14,** in the first sentence of the first paragraph replace "Type 1" with "Type 3".

Page 10-169, Subarticle 1081-3(G), Anchor Bolt Adhesives, delete this subarticle.

**Page 10-170, Article 1081-3, HOT BITUMEN, line 9,** add the following at the end of Section 1081:

#### 1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS

#### (A) General

This section covers epoxy resin adhesive for bonding traffic markers to pavement surfaces.

#### (B) Classification

The types of epoxies and their uses are as shown below:

**Type I** – Rapid Setting, High Viscosity, Epoxy Adhesive. This type of adhesive provides rapid adherence to traffic markers to the surface of pavement.

**Type II** – Standard Setting, High Viscosity, Epoxy Adhesive. This type of adhesive is recommended for adherence of traffic markers to pavement surfaces when rapid set is not required.

**Type III** – Rapid Setting, Low Viscosity, Water Resistant, Epoxy Adhesive. This type of rapid setting adhesive, due to its low viscosity, is appropriate only for use with embedded traffic markers.

**Type IV** – Standard Set Epoxy for Blade Deflecting-Type Plowable Markers.

#### (C) Requirements

Epoxies shall conform to the requirements set forth in AASHTO M 237.

#### (D) Prequalification

Refer to Subarticle 1081-1(E).

#### (E) Acceptance

Refer to Subarticle 1081-1(F).

Page 10-173, Article 1084-2, STEEL SHEET PILES, lines 37-38, replace first paragraph with the following:

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required by the plans. Galvanized sheet piles shall be coated in accordance with Section 1076. Metallized sheet piles shall be metallized in accordance to the Project Special Provision "Thermal Sprayed Coatings (Metallization)" with an 8 mil, 99.9% aluminum alloy coating and a 0.5 mil seal coating. Any portion of the metallized sheet piling encased in concrete shall receive a barrier coat. The barrier coat shall be an approved waterborne coating with a low-

viscosity which readily absorbs into the pores of the aluminum thermal sprayed coating. The waterborne coating shall be applied at a spreading rate that results in a theoretical 1.5 mil dry film thickness. The manufacturer shall issue a letter of certification that the resin chemistry of the waterborne coating is compatible with the 99.9% aluminum thermal sprayed alloy and suitable for tidal water applications.

Page 10-174, Subarticle 1086-1(B)(1), Epoxy, lines 18-24, replace with the following:

The epoxy shall meet Article 1081-4.

The 2 types of epoxy adhesive which may be used are Type I, Rapid Setting, and Type II, Standard Setting. Use Type II when the pavement temperature is above 60°F or per the manufacturer's recommendations whichever is more stringent. Use Type I when the pavement temperature is between 50°F and 60°F or per the manufacturer's recommendations whichever is more stringent. Epoxy adhesive Type I, Cold Set, may be used to attach temporary pavement markers to the pavement surface when the pavement temperature is between 32°F and 50°F or per the manufacturer's recommendations whichever is more stringent.

Page 10-175, Subarticle 1086-2(E), Epoxy Adhesives, line 27, replace "Section 1081" with "Article 1081-4".

Page 10-177, Subarticle 1086-3(E), Epoxy Adhesives, line 22, replace "Section 1081" with "Article 1081-4".

Page 10-179, Subarticle 1087-4(A), Composition, lines 39-41, replace the third paragraph with the following:

All intermixed and drop-on glass beads shall not contain more than 75 ppm arsenic or 200 ppm lead.

Page 10-180, Subarticle 1087-4(B), Physical Characteristics, line 8, replace the second paragraph with the following:

All intermixed and drop-on glass beads shall comply with NCGS § 136-30.2 and 23 USC § 109(r).

Page 10-181, Subarticle 1087-7(A), Intermixed and Drop-on Glass Beads, line 24, add the following after the first paragraph:

Use X-ray Fluorescence for the normal sampling procedure for intermixed and drop-on beads, without crushing, to check for any levels of arsenic and lead. If any arsenic or lead is detected, the sample shall be crushed and repeat the test using X-ray Fluorescence. If the X-ray Fluorescence test shows more than a LOD of 5 ppm, test the beads using United States Environmental Protection Agency Method 6010B, 6010C or 3052 for no more than 75 ppm arsenic or 200 ppm lead.

## **WORK ZONE TRAFFIC CONTROL:** (8-16-11)

(8-16-11) R11 R20(Rev.)

In accordance with Page 11-3, Article 1101-13 Traffic Control Supervision of the 2012 specifications, provide the service of at least one qualified Work Zone Supervisor. The Work Zone Supervisor shall have the overall responsibility for the proper implementation of the traffic management plan, as well as ensuring all employees working inside the NCDOT

Right of Way have received the proper training appropriate to the job decisions each individual is required to make.

The work zone supervisor is not required to be on site at all times but must be available to address concerns of the Engineer. The name and contact information of the work zone supervisor shall be provided to the Engineer prior to or at the preconstruction conference.

Qualification of Work Zone Supervisors shall be done by an NCDOT approved training agency or other approved training provider. For a complete listing of these, see the Work Zone Traffic Control's webpage, http://www.ncdot.gov/doh/preconstruct/wztc/.

In accordance with, Page 11-12, Article 1150-3 Construction Methods, provide the service of properly equipped and qualified flaggers (see Roadway Standard Drawings No. 1150.01) at locations and times for such period as necessary for the control and protection of vehicular and pedestrian traffic. Anyone who controls traffic is required to be qualified. Qualification consists of each flagger receiving proper training in the set-up and techniques of safely and competently performing a flagging operation. Qualification of flaggers is to be done at an NCDOT approved training agency. For a complete listing of these, see the Work Zone Traffic Control's webpage, http://www.ncdot.gov/doh/preconstruct/wztc/.

Prior to beginning work on the project, a Qualification Statement that all flaggers used on the project have been properly trained through an NCDOT approved training resource shall be provided to the Engineer.

Flagging operations are not allowed for the convenience of the Contractor's operations. However, if safety issues exist (i.e. sight or stopping sight distance), the Engineer may approve the use of flagging operations. Use flagging methods that comply with the guidelines in the MUTCD.

#### **GENERAL REQUIREMENTS**

All personnel when working in traffic areas or areas in close proximity to traffic shall wear an approved safety vest, or shirt or jacket and hat or helmet which meets the color requirements of the *Manual of Uniform Traffic Control Devices* (MUTCD).

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, *North Carolina Department of Transportation Standard Specifications for Roads and Structures* 2012, and the current edition of the *Manual of Uniform Traffic Control Devices* (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

Traffic movements through lane closures on roads with two way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the

Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment, including, but not limited to, safety vests and stop/slow paddles.

All personnel when working in traffic areas or areas in close proximity to traffic shall wear an approved safety vest, or shirt or jacket and hat or helmet which meets the color requirements of the *Manual of Uniform Traffic Control Devices* (MUTCD).

Maintain traffic in accordance with Divisions 10, 11 and 12 of the *Standard Specifications* and the following provisions:

For lane closures, refer to the 2012 Roadway Standard Drawings Nos. 1101.02, 1101.11, 1110.02, 1130.01 and details for the Advance Work Zone signing in contract. Use a lane closure when personnel and equipment are working on the shoulder adjacent to an undivided facility and within 5 feet of an open travel lane. Close the nearest open travel lane using the 2012 Roadway Standard Drawings No. 1101.02 unless the work area is protected by barrier or guardrail. When personnel and equipment are working on the shoulder, adjacent to a divided facility and within 10 feet of an open travel lane, close the nearest open travel lane using the 2012 Roadway Standard Drawings No. 1101.02 unless the work area is protected by barrier or guardrail. When personnel and equipment are working within a lane of travel of an undivided or divided facility, close the lane according to the traffic control plans, 2012 Roadway Standard Drawings or as directed by the Engineer. Conduct the work so that all personnel and equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Do not perform work involving heavy equipment within 15 feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

Refer to Attached Details and the *Roadway Standard Drawings* Nos. 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, 1170.01 and 1180.01 when closing a lane of travel in a stationary work zone. Properly ballasted cones may be used instead of drums for lane closures during daylight hours. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 3 miles in length at any given time unless otherwise directed by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the 2012 *Standard Specifications* and the Engineer.

Operate equipment and conduct operations in the same direction as the flow of traffic. Do not cross medians with equipment, except at properly designated interchanges.

Provide appropriate lighting in accordance with Section 1413 of the Standard Specifications.

When cable guiderail and guardrail installation and repair is performed on multi-lane facilities in areas needing a full lane closure or as determined by the Engineer, the Contractor shall provide a full lane closure in accordance with the latest edition of the Manual on Uniform Traffic Control Devices, and payment will be made on a separate bid item for full lane closure. Payment under the pay item "Traffic Control (Full Lane Closure/Each)" will be full compensation for all costs of furnishing, installing, maintaining, relocating and finally removing any and all signs, barricades, drums, cones, flashing arrow boards, truck mounted attenuators and all other traffic control devices required to safely perform the construction work and protect the public. This item will be applicable for each location when the District Engineer authorizes a full lane closure.

Traffic control on roadways that require the road to be closed and detoured shall be done by State Forces.

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his/her own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in Subarticle 108-7(b) of the Standard Specifications.

Payment will be made under:

**Pay Item**Traffic Control (Full Lane Closure)

Pay Unit Each

## STANDARD SPECIAL PROVISION AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08)

Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in General Statute 143C-6-11(c). Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(E) of the 2012 Standard Specifications.

#### STANDARD SPECIAL PROVISION

#### **ERRATA**

(1-17-12) (Rev. 04-21-15)

Revise the 2012 Standard Specifications as follows:

#### **Division 2**

**Page 2-7, line 31, Article 215-2 Construction Methods,** replace "Article 107-26" with "Article 107-25".

Page 2-17, Article 226-3, Measurement and Payment, line 2, delete "pipe culverts,".

Page 2-20, Subarticle 230-4(B), Contractor Furnished Sources, change references as follows: Line 1, replace "(4) Buffer Zone" with "(c) Buffer Zone"; Line 12, replace "(5) Evaluation for Potential Wetlands and Endangered Species" with "(d) Evaluation for Potential Wetlands and Endangered Species"; and Line 33, replace "(6) Approval" with "(4) Approval".

#### Division 3

Page 3-1, after line 15, Article 300-2 Materials, replace "1032-9(F)" with "1032-6(F)".

#### **Division 4**

Page 4-77, line 27, Subarticle 452-3(C) Concrete Coping, replace "sheet pile" with "reinforcement".

#### **Division 6**

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments, replace "30" with "45".

Page 6-10, line 42, Subarticle 609-6(C)(2), replace "Subarticle 609-6(E)" with "Subarticle 609-6(D)".

**Page 6-11, Table 609-1 Control Limits,** replace "Max. Spec. Limit" for the Target Source of P<sub>0.075</sub>/P<sub>be</sub> Ratio with "1.0".

**Page 6-40, Article 650-2 Materials,** replace "Subarticle 1012-1(F)" with "Subarticle 1012-1(E)"

#### **Division 7**

Page 7-1, Article 700-3, CONCRETE HAULING EQUIPMENT, line 33, replace "competion" with "completion".

#### **Division 8**

**Page 8-23, line 10, Article 838-2 Materials,** replace "Portland Cement Concrete, Class B" with "Portland Cement Concrete, Class A".

#### **Division 10**

**Page 10-166, Article 1081-3 Hot Bitumen,** replace "Table 1081-16" with "Table 1081-2", replace "Table 1081-17" with "Table 1081-3", and replace "Table 1081-18" with "Table 1081-4".

#### **Division 12**

Page 12-7, Table 1205-3, add "FOR THERMOPLASTIC" to the end of the title.

Page 12-8, Subarticle 1205-5(B), line 13, replace "Table 1205-2" with "Table 1205-4".

Page 12-8, Table 1205-4 and 1205-5, replace "THERMOPLASTIC" in the title of these tables with "POLYUREA".

Page 12-9, Subarticle 1205-6(B), line 21, replace "Table 1205-4" with "Table 1205-6".

Page 12-11, Subarticle 1205-8(C), line 25, replace "Table 1205-5" with "Table 1205-7".

#### **Division 15**

**Page 15-4, Subarticle 1505-3(F) Backfilling, line 26,** replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)".

**Page 15-6, Subarticle 1510-3(B), after line 21,** replace the allowable leakage formula with the following:  $W = LD\sqrt{P} \div 148,000$ 

Page 15-6, Subarticle 1510-3(B), line 32, delete "may be performed concurrently or" and replace with "shall be performed".

**Page 15-17, Subarticle 1540-3(E), line 27,** delete "Type 1".

#### **Division 17**

Page 17-26, line 42, Subarticle 1731-3(D) Termination and Splicing within Interconnect Center, delete this subarticle.

Revise the 2012 Roadway Standard Drawings as follows:

Replace Section 862 with attached updated section 862 sheets of the *Roadway Standard Drawings* 

**1633.01 Sheet 1 of 1, English Standard Drawing for Matting Installation,** replace "1633.01" with "1631.01".

#### STANDARD SPECIAL PROVISION

#### PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

(3-18-03) (Rev. 10-15-13)

Z-04a

#### Within Quarantined Area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

#### **Originating in a Quarantined County**

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

#### Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or <a href="http://www.ncagr.gov/plantind/">http://www.ncagr.gov/plantind/</a> to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

#### **Regulated Articles Include**

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- 2. Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

#### STANDARD SPECIAL PROVISION

#### **MINIMUM WAGES**

(7-21-09) Z-5

**FEDERAL:** The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The North Carolina Minimum Wage Act provides that every employer shall pay to each of his/her employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his/her contract.

### **STANDARD SPECIAL PROVISION**

### **ON-THE-JOB TRAINING**

(10-16-07) (Rev. 4-21-15)

Z-10

### **Description**

The North Carolina Department of Transportation will administer a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternate OJT Program. All contractors (existing and newcomers) will be automatically placed in the Alternate Program. Standard OJT requirements typically associated with individual projects will no longer be applied at the project level. Instead, these requirements will be applicable on an annual basis for each contractor administered by the OJT Program Manager.

On the Job Training shall meet the requirements of 23 CFR 230.107 (b), 23 USC – Section 140, this provision and the On-the-Job Training Program Manual.

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority shall be given to training employees on NCDOT Federal-Aid funded projects.

### **Minorities and Women**

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

### **Assigning Training Goals**

The Department, through the OJT Program Manager, will assign training goals for a calendar year based on the contractors' past three years' activity and the contractors' anticipated upcoming year's activity with the Department. At the beginning of each year, all contractors eligible will be contacted by the Department to determine the number of trainees that will be assigned for the upcoming calendar year. At that time the Contractor shall enter into an agreement with the Department to provide a self-imposed on-the-job training program for the calendar year. This agreement will include a specific number of annual training goals agreed to by both parties. The number of training assignments may range from 1 to 15 per contractor per calendar year. The Contractor shall sign an agreement to fulfill their annual goal for the year.\

### **Training Classifications**

The Contractor shall provide on-the-job training aimed at developing full journeyman level workers in the construction craft/operator positions. Preference shall be given to providing training in the following skilled work classifications:

Equipment Operators Office Engineers

Truck Drivers Estimators

Carpenters Iron / Reinforcing Steel Workers

Concrete Finishers Mechanics
Pipe Layers Welders

The Department has established common training classifications and their respective training requirements that may be used by the contractors. However, the classifications established are not all-inclusive. Where the training is oriented toward construction applications, training will be allowed in lower-level management positions such as office engineers and estimators. Contractors shall submit new classifications for specific job functions that their employees are performing. The Department will review and recommend for acceptance to FHWA the new classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

Proposed training classifications are reasonable and realistic based on the job skill classification needs, and

The number of training hours specified in the training classification is consistent with common practices and provides enough time for the trainee to obtain journeyman level status.

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

### **Records and Reports**

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information as requested shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

### **Trainee Interviews**

All trainees enrolled in the program will receive an initial and Trainee/Post graduate interview conducted by the OJT program staff.

### **Trainee Wages**

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

### **Achieving or Failing to Meet Training Goals**

The Contractor will be credited for each trainee employed by him/her on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

### **Measurement and Payment**

No compensation will be made for providing required training in accordance with these contract documents.

### **STANDARD SPECIAL PROVISION**

### **NAME CHANGE FOR NCDENR:**

(1-19-16) Z-11

Wherever in the 2012 Standard Specifications, Project Special Provisions, Standard Special Provisions, Permits or Plans that reference is made to "NCDENR" or "North Carolina Department of Environment and Natural Resources", replace with "NCDEQ" or North Carolina Department of Environmental Quality" respectively, as the case may be.

### ADDENDUM(S)

ADDENDUM #1	
I,(SIGNATURE)	representing
Acknowledge receipt of Addendum #1.	
ADDENDUM #2	
I,(SIGNATURE)	representing
Acknowledge receipt of Addendum #2.	
ADDENDUM #3	
I,(SIGNATURE)	representing
Acknowledge receipt of Addendum #3.	

### North Carolina Department of Transportation SMALL BUSINESS ENTERPRISE CONTRACT BID FORM

Contract No: 11742656

Work Order Number: To Be Determined

Description: Maintenance and Replacement of Cable Guiderail and Guardrail Components

Counties: Chatham, Montgomery, Randolph Counties

ITEM	ACTIVITY NO.	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
1	SP	SP	Emergency Call Back Mobilization	5	EA		
2	SP	SP	Traffic Control (Full Lane Closure)	5	EA		
3	4103357	865	New Post and Hardware	10	EA		
4	SP	865	Re-tension	10	EA		
5	SP	865	Splice	10	EA		
6	SP	865	Turnbuckles	10	EA		
7	4103425	863	Guardrail Removal	150	LFT		
8	4103300	862	Shop Curve (Various Radii)	150	LFT		
9	4103335	862	Terminal End Section	2	EA		
10	SP	862	Steel Beam Guardrail (with Steel Post)	150	LFT		
11	SP	862	Additional Guardrail Post (Steel)	10	EA		
12	SP	862	8' Steel Post	10	EA		
13	SP	862	Additional Steel Guardrail Post with 3" Non-Shrink Grout	2	EA		
14	SP	862	Additional Offset Blocks (Recycled plastic or recycled composite)	10	EA		
15	SP	862	Buffer End Section for CAT-1 Sections	2	EA		
16	4103294	862	Guardrail with Pre-punched Holes for Cable Assembly (Rail Only)	50	LFT		
17	4103293	862	Steel Beam Guardrail (Rail Only)	150	LFT		
18	4103365	862	Guardrail Anchor Unit, Type CAT-1	2	EA		
19	SP	862	Guardrail End Unit, Type TL-3	10	EA		
20	SP	862	Guardrail Anchor Unit M-350	2	EA		

ITEM	ACTIVITY NO.	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
21	SP	862	Buffer End Section for M-350 (Replacement Part)	2	EA		
22	SP	862	Guardrail Anchor Unit Type B-	2	EA		
23	SP	862	Impact Attenuator Type TL-3	5	EA		
24	SP	862	Guardrail Anchor Unit Type B-83	2	EA		
25	SP	862	Hammer (Replacement Part)	5	EA		
26	SP	862	Yoke (Replacement Part, Type 350)	5	EA		
27	SP	862	Cable (Replacement Part, Type 350)	5	EA		
28	SP	862	Cable Bracket (Replacement Part, Type 350)	5	EA		
29	SP	862	25' Anchor Rail (Replacement Part, Type 350)	5	EA		
30	SP	862	Post One and Two Steel (Replacement Part, Type 350) 5 EA				
31	SP	862	Post Three – Eight Steel (Replacement Part, Type 350) 5 EA				
32	SP	1261	Guardrail Delineators (Permanent, Crystal) 10 EA				
33	SP	1261	Guardrail Delineators (Permanent, Yellow)	10	EA		
34	SP	862	Quadguard TL-2 (3-Bay/4 Cartridges)	2	EA		
35	SP	862	Repair Quadguard Replace Cartridges Each Cartridge	8	EA		
36	SP	862	Thrie Beam Guardrail	50	LFT		
37	SP	862	WTR Transition Section	2	EA		
38	SP	862	Tubular Guardrail	50	LFT		
39	4103415	864	Remove and Reset Guardrail	150	LFT		
40	SP	862	Nose Repair	2	EA		
41	SP	862	Side Panels Each Panel Repair	4	EA		
42	SP	865	Reset Conc. Anchor for Cable Guiderail	5	EA		
43	SP	862	NonGalvanized Steel Beam Guardrail (Composite Posts)	150	LFT		
44	SP	862	NonGalvanized Additional Post (Steel)	10	EA		

ITEM	ACTIVITY NO.	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
45	SP	862	NonGalvanized Type TL-3 End Unit	2	EA		
46	SP	862	NonGalvanized CAT-1 End Unit	2	EA		
47	SP	862	Structure Anchor Unit, Anchorage on Box Culvert	2	EA		

TOTAL BID FOR PROJECT.	
CONTRACTOR	
ADDRESS	
Federal Identification Number	Contractors License Number
Authorized Agent	Title
Signature	Date

### **EXECUTION OF BID**

### NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

### CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Full name of Corporation		
Address as Prequalified		
Attest	By	
Secretary/Assistant Secretary Select appropriate title		President/Vice President/Assistant Vice President Select appropriate title
Print or type Signer's name	_	Print or type Signer's name
		CORPORATE SEAL
AFFIDAVIT MUST BE NOTARIZED		
Subscribed and sworn to before me this the		
day of 20		
		NOTARY SEAL
Signature of Notary Public		
ofCounty		
State of		
My Commission Expires:		

#### **PARTNERSHIP**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Full Name of Partnership		
Address as Prequalified		
Signature of Witness	By	Signature of Partner
		Signature of Partner
Print or type Signer's name	=	Print or type Signer's name
AFFIDAVIT MUST BE NOTARIZED  Subscribed and sworn to before me this the		NOTARY SEAL
day of 20		NOTART SEAL
Signature of Notary Public		
Signature of Notary Public		
ofCounty		
State of		
My Commission Expires:		

#### LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Full Name of Firm	
Address as Prequalified	
Signature of Witness	Signature of Member/Manager/Authorized Agent Select appropriate title
Print or type Signer's name	Print or type Signer's Name
AFFIDAVIT MUST BE NOTARIZED	
Subscribed and sworn to before me this the	NOTARY SEAL
day of 20	
	_
Signature of Notary Public	
ofCounty	
State of	
My Commission Expires:	

### EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION JOINT VENTURE (2) or (3)

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

### SIGNATURE OF CONTRACTOR

Instructions: **2 Joint Venturers** Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1)					
(2)	Name of Joint Venture				
. ,	Name of Contractor				
	Address as prequalified				
	Signature of Witness or Attest	Ву	Signature of	Contractor	
	Print or type Signer's name		Print or type	Signer's name	
	If Corporation, affix Corporate Seal	and			
(3)	Name of Contractor				
	Address as prequalified				
	Signature of Witness or Attest	Ву	Signature of	Contractor	
	Print or type Signer's name		Print or type	Signer's name	
	If Corporation, affix Corporate Seal	and			
(4)					
	Name of Contractor (for 3 Joint Venture only)				
	Address as prequalified				
	Signature of Witness or Attest	Ву	Signature of	Contractor	
	Print or type Signer's name		Print or type	Signer's name	
If Co	orporation, affix Corporate Seal				
ARY SEAL		NOTARY SEAL		NOTARY SEAL	
davit must be notarized for Line (2)		Affidavit must be notarized for Line (3)		Affidavit must be not	` '
	and sworn to before me this	Subscribed and sworn		Subscribed and sworm	
_uay oi	20	day of	20	day of	20
	Notary Public	Signature of Notary Pr		Signature of Notary P	
	County	of State of		of State of	
	sion Expires:	My Commission Exp		My Commission Expi	
Commis	sion Expires	iviy Commission Exp	1103	iviy Commission Exp	1103

### INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Name of Contractor		
	Individual nam	е
Trading and doing business as		
	Full name of Fi	irm
Signature of Witness		Signature of Contractor, Individually
Print or type Signer's name		Print or type Signer's name
AFFIDAVIT MUST BE NOTARIZ	ZED	
Subscribed and sworn to before me the	his the	NOTARY SEAL
day of	20	
Signature of Notary Public		
of	_County	
State of		
My Commission Expires:		

### INDIVIDUAL DOING BUSINESS IN HIS/HER OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Name of Contractor	
Print or type Individual name	
Address as Prequalified	
	Signature of Contractor, Individually
	Print or type Signer's Name
Signature of Witness	_
Print or type Signer's name	
AFFIDAVIT MUST BE NOTARIZED	
Subscribed and sworn to before me this the	NOTARY SEAL
	NOTAKI SEAL
day of 20	
Signature of Notary Public	•
ofCounty	
State of	
My Commission Expires:	

### **DEBARMENT CERTIFICATION**

### Conditions for certification:

- 1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his/her certification was erroneous when he/she submitted his/her debarment certification or explanation filed with the Department, or has become erroneous because of changed circumstances.
- 2. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
- 3. The prequalified bidder agrees by submitting this form, that he/she will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
- 4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he/she will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR* 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.
- 5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he/she is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he/she knows that the certification is erroneous. The bidder may decide the method and frequency by which he/she will determine the eligibility of his/her subcontractors.
- 6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

### **DEBARMENT CERTIFICATION**

The prequalified bidder certifies to the best of his/her knowledge and belief, that he/she and his/her principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his/her status changes and will show in his/her bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he/she is not debarred, he/she shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.
 1

Date

ACCEPTED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
Division Contract Officer	

Signature Sheet (Bid) - ACCEPTANCE SHEET